

# Asian ICT Council Newsletter



Confederation of Asia-Pacific Chambers of  
Commerce and Industry

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**2019 CACCI Conference**

**33rd CACCI Conference  
to be held in  
Kitakyushu, Japan**

## Message from the ICT Council Chairman

It is a pleasure to present to you “Asian ICT Council” newsletter, edition 7, 2019. This publication is a compendium on relevant news, reports, and analyses on recent developments in the information and telecommunication technology sector in Asia Pacific countries.

The articles contained in this issue show an immense multibillion dollar Asia-wide expansion on ICT investment that is simultaneously experiencing growing cyber threats affecting many countries, from Azerbaijan all the way to Philippines. Other countries such as Turkmenistan and Pakistan are also trying to develop an ICT center to improve government services and attract investment. At the microeconomic level, another news report indicates that ICT investment has a direct and positive impact in accounting operations.

ICT investment in Indonesia and Singapore shows to boost human capital and provides opportunity for young workers; and then, in Vietnam we observe that Smart City plans are being seriously explored. In conclusion, the digital economy is moving forward everywhere in Asia, buttressed by big investment plans and plenty of business opportunities.

We hope that this latest issue of the “Asian ICT Council” newsletter will help you better understand the trends and conditions of the information and communication technology (ICT) throughout the Asia Pacific region. Enjoy your reading!



**Dr. Gwo-Jiunn Huang**

*Chairman, IISI (International Integrated Systems, Inc.)*

*Chairman, Asian ICT Council*

## Global market for smart city ICT seen to reach \$ 994.6B by 2023

[Azernews 1 April 2019](#)



Dubai - The global market for smart city information and communications technology (ICT) is forecasted to hit the US\$ 994.6 billion mark by 2023 from US\$ 476.7 billion in 2018, representing a compound annual growth rate (CAGR) of 15.8%, a report by BCC research showed. The report attributed the exponential expansion to the rising number of smart cities worldwide in light of the rapid urbanization rate, booming population, and calls for sustainable development.

North America is seen to take the lead in terms of market size but Asia-Pacific will experience the highest growth at 18.9% CAGR, the report said. In MENA region, a separate study conducted by KPMG revealed that smart city spending will double from US\$ 1.3 billion to US\$ 2.7 billion by 2022.

“Advanced technologies are at the very heart of a connected and automated city of the future. This reality is the influential force behind the flourishing global smart

city ICT market worldwide as presented by the BCC research. Sensors, the Internet of Things (IoT), robotics and machine learning, blockchain, artificial intelligence (AI), and many more are going to serve as a foundation for smart cities and their complex ecosystems. Discussions on the role of technologies in connectivity and sustainability, among others, took centre stage at the 2019 edition of the Future Cities Show in Dubai, where experts, leaders, and stakeholders convened to tackle opportunities and challenges in establishing genuine smart cities,” said Dawood Al Shezawi, President of Strategic Marketing and Exhibitions, the organiser of the Future Cities Show.

The show’s third edition took place from 8th to 10th of April 2019 at the Dubai World Trade Centre under the theme ‘Propelling Globalization through Digital Transformation’.

Geospatial and 5G technologies as well as virtual reality and augmented reality

will also play a role in enabling the growth of smart cities and are seen as fundamental backbones of smart city projects.

Al Shezawi said: “These advanced solutions will be used for waste management, intelligent lighting, parking and traffic control, pollution monitoring, and efficient public transportation system. The possibilities are simply endless. We have to continue our dialogues to ensure that we are harnessing the full potentials of new technological innovations available today. If technologies are properly utilized, the benefits are going to be enormous.”

Barcelona, one of the world’s best smart cities along with Singapore and London as per the report of Philips Lighting released in 2018, is said to have been

reaping the benefits of deploying IoT solutions. According to the report, the implementation led to the creation of an estimated 47,000 jobs, savings of EUR 42.5 million on water, and increased revenues of EUR 36.5 million a year through smart parking fees.

Future Cities Show will focus on five leading future city solutions, namely AI, blockchain, smart infrastructure, smart mobility, and sustainability. It also provided a platform to ensure that the latest technological projects had the opportunity to secure medium- to large-scale investments. In addition, the show highlighted the achievements and plans of its host city, Dubai, such as Dubai 10X Initiatives set by H.H. Sheikh Mohammed bin Rashid Al Maktoum, UAE Vice President, Prime Minister and Ruler of Dubai.

## Azerbaijan taking all steps to minimize cyber threats: minister

[Azernews, Mirsaid Ibrahimzade, 13 March 2019](#)

Within framework of “Cyber security week”, VI Regional Internet Governance Forum on “Cyber security: our shared responsibility” was held in Baku on March 13, Trend reported.

The event was organized by the Ministry of Transport, Communications and High Technologies of Azerbaijan and the United Nations Development Program.

The forum brought together local and foreign experts who discussed the current situation and upcoming challenges in the field of ensuring cyber security, secure Internet, innovative

solutions in the field of cyber security and other issues.

Minister of Transport, Communications and High Technologies of Azerbaijan Ramin Guluzade stated that special attention is paid to cyber security and all steps are being taken to minimize cyber threats.

Guluzade also noted that new technologies are opening the way to new types of crime, the number of cybercrimes is increasing every year. Given this, Azerbaijan has prepared a cyber security strategy for 2019-2024.



*Minister of Transport, Communications and High Technologies of Azerbaijan Ramin Guluzade*

Then, minister added that thanks to information technologies, the economy of Azerbaijan has risen to a new level, and relations between the state and citizens have become more transparent.

The minister went on to say that information technologies and the internet play a special role in the development of the country. He also emphasized that today more than 80 percent of the country's population use the Internet, of which 76% use broadband Internet.

Touching upon the cooperation with the United Nations Development Program, the minister noted that the organization supports ICT programs implemented in Azerbaijan.

“These programs contribute to sustainable development in the country,” Guluzade said.

So, during the forum, Deputy Head of the United Nations Development Program, Director of the Regional Bureau for Europe and the CIS Mirjana Egge stated that the UN Development Program highly appreciates the steps taken by Azerbaijan for the development of the ICT sphere and the full transition to the e-government system.

She noted that the Internet and information technologies are an important component of society.

"The Internet is, first of all, education. It is necessary to use it for the good," added Egge.

Speaking about the role of the regional forum, Egger noted that it will create new opportunities to explore the potential of Internet technologies and opportunities to avoid cyber threats.

## ICT conference held in Baku

[Azernews, Mirsaid Ibrahimzade, 12 March 2019](#)

A conference entitled “Reliable and secure cloud environment” which gathered representatives of the ICT sector was held in Baku on March 12.

The geographical backup DATA-center being built in Azerbaijan’s Yevlakh District may be commissioned in July of this year, Jeyhun Aliyev, AzInTelecom deputy director, said at the conference.

Aliyev noted that backup is a very important technology, with the help of which it is possible to easily restore any lost information.

"There are companies that do not have their own IT infrastructure, and they may store their information in our database, which we are building in Yevlakh," he said.



The backup center will ensure the continuous operation of critical systems in case of failure of the main center located in Baku, which will further strengthen the durability and reliability of the AzIntelecom IT infrastructure in case of accidents.

AzIntelecom LLC has started commercial exploitation of resources of the largest DATA-center in Azerbaijan since January 2017. The DATA-center received a certificate of compliance of the Tier3 level, the very provision of which is an official confirmation of it being designed based on international standards and meeting the necessary criteria of reliability and security.

Afterwards, Kirill Oparin, head of the International Telecommunication Union (ITU) Regional Office for CIS, said that the ICT sphere in Azerbaijan is developing thanks to the right state strategy and the successful cooperation

between the state and the private sector.

Oparin recalled that President of Azerbaijan Ilham Aliyev noted during his speech at the forum in Davos that the development of the country will depend on innovation and the introduction of new technologies.

"We can now confidently say that the words of the Azerbaijani president have become reality," Oparin said.

The Head of the Regional Office noted that today all countries of the region are considering and implementing strategies and plans for the development of infrastructure and the digital economy at the state level.

"National strategies and programs provide for digitalization of services, expanding the export of ICT goods and services, building human resources, addressing the issue of information security and other important issues," Oparin said.

In general, Azerbaijan is one of the leading countries implementing high technologies in the region. Investment in the development of the ICT sector in Azerbaijan is expected to rise to \$4 billion by 2020. Today, the country constructs high tech parks in the capital and in regions.

Due to the full transition to digital broadcasting in our country, the population now has the opportunity to watch radio and television broadcasts without interruption. The range and scope of postal and telecommunication services have grown and the infrastructure has been upgraded

For the first time in Azerbaijan, all regional centers of the country joined the main fiber-optic telecommunication network, Azerbaijan has the most secure Data Center in the region. Today, local and international IT service providers can create their own infrastructure safely in Data Center

One of the biggest achievements of Azerbaijan in the field of ICT in recent

years is that, first of all, it is the only country in the region that has a space industry.

The country is also paying much attention to the formation of "electronic government" and simplification of the official civil relationships through the use of IT means to prevent bureaucratic obstacles.

## Turkmenistan to create IT cluster

[Azernews Trend, 28 March 2019 10:17 \(UTC+04:00\)](#)



The Union of Industrialists and Entrepreneurs of Turkmenistan (UIET) has put forward an initiative to create an IT-Cluster in line with the Concept of Development of Digital Economy for 2019-2025, Trend reported referring to the union.

The UIET has already organized seminars with the participation of specialists from Turkey's Inovera and Telekom Telekomunikasyon Dis Tic. ve san. A.S. companies, experienced in the

implementation of e-government and cybersecurity systems.

The event was attended by representatives of government agencies that are part of the working group on the digital economy under the Turkmen Parliament.

According to the aforementioned concept, an "e-government" system is planned to be developed in Turkmenistan, which is expected to be organized in a fuel and energy complex, chemical industry, processing industry, construction, transport, telecommunications, medicine, textile industry and the agricultural sector.

The new system is expected to allow for a quick and efficient supervision of the seasonal work, as well as provide the opportunity for continuous monitoring and operational decision-making at the level of the sectoral ministry, as well as the administration and agribusinesses.

Local economists think that the implementation of e-government will help improve the efficiency of enterprise management, provide an opportunity for operational control at all stages of business process management, reducing document passage cycles and the

execution time of basic functions, and will ensure rapid search for information necessary for making management decisions.

The Turkmen government and the UN are discussing a project of cooperation in the field of reforming and strengthening public administration mechanisms, including macroeconomic regulation and e-government.

## Working to raise export earnings from ICT goods to US\$ 7 billion: Bangladeshi Minister Jabbar

[Independent Online Desk, 16 January 2019](#)



*Posts, Telecommunications and Information Technology Minister Mustafa Jabbar said the government is working to raise the export earnings from ICT goods to US\$ 7 billion by 2023.*

“We are optimistic to achieve the target which was set for 2021 within the stipulated time. Government is working relentlessly to launch fast track service for the foreign investors to ensure quick and hassle free service for them in country’s ICT sector,” he said.

Jabbar came up with the observations while addressing a function organised for signing a memorandum of understanding (MoU) between

Bangladesh Investment Development Authority (BIDA) and Leveraging ICT for Growth, Employment and Governance (LICT) project of Bangladesh Computer Council (BCC) at its auditorium in capital’s ICT Tower.

BCC Executive Director Parthapratim Deb, BIDA Secretary Md Mosharraf Hossain signed the MoU for their respective organisations.

State Minister for ICT Division Zunaid Ahmed Palak, BIDA Executive Chairman Qazi M Aminul Islam, ICT Division Secretary Zuena Aziz and LICT component team leader Summy Ahmed addressed the programme, among others.

“We have to start work from right now by setting short, middle and long term goal to attract foreign investors. We can work to resolve five obstacles in investment as part of the short term activities,” Palak said, adding, “We can organise Hackathon like earlier to get the result in this regard.”BSS.



# Why data privacy will remain a hot tech topic for those who want to avoid an Orwellian future

[South China Morning Post, Jonas Lipsius, 21 February 2019](#)

People are becoming more and more vulnerable thanks to the sheer amount of data that we willingly hand over on a daily basis to companies we trust implicitly



Protecting privacy will remain an issue for people, governments and companies as technology scoops ever more data.  
Photo: Handout

Recently it was revealed that a number of iPhone apps using analytics from software company Glassbox Digital embedded a 'session replay' feature that essentially recorded the screens of users while they used the app – capturing sensitive data including credit card details and passwords along the way.

The companies using the technology were not obscure or small-scale either – including apps from industry heavyweights such as Singapore Airlines, Air Canada, Expedia, Hotels.com and many more. Although in this case access to a customer's sensitive information was retained somewhat unintentionally, it once again

highlighted the vulnerability for consumers that is inherent and always present when we regularly entrust our most sensitive and private information to major corporations.

Although we are not even 50 days into the new year, there have already been a number of major news stories that have once again brought the issues of privacy and data security back into the public consciousness. In January this year, it came to light that Facebook had exploited a loophole in Apple's enterprise software platform (normally restricted for internal company use only) to distribute a 'research' app outside of Facebook that was used to (among other things) track teenage users.

And weeks ago, a critical flaw in Apple's FaceTime software for iOS devices was exposed that allowed a user's microphone to be turned on without their knowledge or permission before answering or declining a FaceTime group chat call.

While much has already been written about the increasing number of major data breaches that have occurred in the last few years, what has become painfully obvious recently is that while we do face serious threats to our privacy from our information getting into the wrong hands, we are also becoming more and more vulnerable thanks to the sheer amount of data that we willingly hand over on a daily basis to companies we trust implicitly.

As our phones and other mobile devices take on a more central role in our daily existence, we are also willingly (and perhaps unwittingly) generating an ever-increasing amount of data that can serve to paint a picture of our lives in the most intimate and excruciating detail.

The fact is though, when we do not think about it too much, most of us are actually pretty happy with giving away this level of information when we get a better user experience or greater level of convenience in exchange. After all, using your face or your fingerprint to access all of your apps is so much easier than typing in one of the half-dozen passwords you use, and it saves a few valuable seconds when directions to the restaurant you have booked show up automatically in your maps apps, thanks to the confirmation email sent to your inbox a few days ago.

While the level of data collection by analytics companies like Glassbox has been steadily on the rise – thanks predominately to significant advances in technology and the increased collection of big data sets – there are promising signs that 2019 might be the year that governments around the world start to become more proactive in clamping down on companies that overstep the mark. Last week, the competition regulator in Germany ordered Facebook to reduce the amount of data it collects without explicitly seeking consent from users. And overnight, news broke that the social media giant was also in negotiations with the US Federal Trade Commission on what could ultimately be a multibillion-dollar fine for the company in response to its numerous privacy breaches.

We do not have to look very far to catch a glimpse of where this technology ultimately might be leading us.

Recently in parts of China, the government has been experimenting with rolling out its ‘social credit’ scoring system, which automatically sucks up and accumulates masses of user data including a person’s credit score, purchase records, social media posts, location information and much more to give the person a rating that ultimately determines what they can do with their lives. This includes whether they can obtain finance for a house, how visible they will be to others on dating sites, and even whether they can buy a plane ticket just to leave the very place they live.

Particularly worrying about the current situation in China is that by simply mandating the aggregation and centralisation of the mountains of data already generated on a daily basis by citizens going about their private lives, the government has created the ability to mould and shape society to its will, should it wish to do so.

And while China is far more aggressive than many other countries in its quest for data dominance, the fact that far-reaching laws allowing governments across the world to access data from personal phones and devices are increasingly being passed without any real opposition is cause for just a little bit of concern.

Irrespective of the differences between China and western countries in relation to their approaches to state-sanctioned data collection, it is undeniable that we all live in a world where an increasing amount of our sensitive information is

being captured, analysed and used to influence the experiences that we have in our day-to-day lives.

And while the last few years have shown us the importance of being vigilant in who we choose to give our sensitive information to, there is a real possibility that in the future we may be stripped of our ability to make that choice at all.

Although it's somewhat poignant that I'm re-reading 1984 by George Orwell at the

moment — looking at some of the privacy-related stories in the news right now actually makes for a more confronting affair.



*Jonas Lipsius is an Australian lawyer currently living in Switzerland, who has interests in management, tech, privacy and legal issues.*

## How technology is reshaping accounting

[South China Morning Post, Chris Davis, 18 January 2019](#)

Accounting and finance practitioners need an optimal combination of professional competencies that integrate technical skills with personal qualities



As a new era dawns in the accounting and finance sectors, increasingly driven by disruptive technologies, advances in artificial intelligence (AI), robotics and machine-learning technologies are redefining established business models while creating new challenges and opportunities.

Jane Cheng, head of ACCA (Association of Chartered Certified Accountants) Hong Kong, believes that technological advances can

provide significant benefits to accounting and finance professionals if they are willing to embrace them. To continue to add value to employers and clients, Cheng says accounting professionals need an optimal combination of professional competencies that integrate technical skills with personal qualities. “ACCA professionals must have the skills to understand the transformative power of technologies such as artificial intelligence,” Cheng says.

Getting to grips with fintech is also a must. “Having the skills to understand its transformative powers, and the ability to manage and use it, is essential,” says Cheng, who points out that digital technologies such as AI have the potential to impact and transform the practice of accounting and the competencies that accounting professionals require.



*Jane Cheng, ACCA*

The ACCA report “The Race for Relevance” highlights six technologies that are having an impact on the accounting and finance landscape. These include cloud-based computing; data analytics; robotic process automation; social media; cyber security, and AI.

“In various combinations, for any enterprise, these have the potential to change ways of working, to automate job tasks and require new skills,” Cheng says. For example, lower-level accounting roles are increasingly disappearing, while entrants joining the accounting profession are expected to undertake more complex tasks at the start of their careers.

To ensure accounting professionals are sought after globally by staying up-to-date with the evolving business and technology environment, the ACCA has introduced major innovations to its flagship qualification programme, which includes adding a Digital Quotient (DQ). DQ is defined as the awareness and application of existing and emerging digital technologies, capabilities, practices, strategies and culture. Additional quotients essential for accountants to achieve success in the evolving accounting profession include technical and ethical, creative emotional intelligence, vision and experience.

“All changes and improvements to our exam model are designed to benefit our students,” says Cheng, who explains that improvements to the exam model take into account the feedback from the ACCA’s more than 7,300 approved employer partners worldwide. With more than 208,000 qualified professional members, and 503,000 students in 179 countries, the ACCA was the first global accountancy body to enter mainland China, where it now has 25,000 qualified members and 108,000 students.

The digital age is having an impact on the financial planning profession. But the Institute of Financial Planners of Hong Kong’s (IFPHK) chairman, Steve Chiu, believes that while technology will continue to play an increasingly integrated role in the financial planning environment, it may augment what financial planners are able to offer, but never replace them.

While clients are able to use apps and technology tools that their financial adviser provides to access online reports and investment information, Chiu says it is the human-to-human interaction with clients, and the understanding of their behavioural preferences as they make changes in their lives, that separate professional financial planners from technology.

“Financial planning involves a lot more than simply constructing an investment portfolio; it is the interpersonal relationships built on trust, instinct and professionalism, that make the difference,” says Chiu. To develop and maintain its high professional standards and ethical discipline, IFPHK has introduced a vigorous certification process to ensure that all its financial planner (CFP) professionals satisfy the requisite standards known as the 4Es: education, examination, experience and ethics.



*Steve Chiu of IFPHK*

As the body awarding CFP Certification in Hong Kong and Macau, Chiu says the IFPHK requires all applicants to satisfy rigorous certification requirements to ensure financial planners are committed to providing competent and ethical financial planning services to clients to help them meet their financial life goals. Regarded as one of the toughest financial services credentials to earn, Chiu says when it comes to ethics and professional responsibility, CFP professionals are held to the highest of standards outlined in the Board's Code of Ethics. Chiu says it is noteworthy that the ethics, professionalism and diligence the Code required exceeds those set by most regulatory bodies.

The CFP certification programme can take several years to complete, and the CFP Board recommends at least 250 hours of study as being necessary to be exam-ready. Currently, there are about 135,000 qualified CFPs globally, including about 4,500 in Hong Kong, which, according to Chiu, is the highest per-capita ratio in the world.

In Hong Kong, about 40% of CFPs work in the banking industry and the same number in the insurance industry, while the rest are independent financial advisers or work for specialist financial planning firms.

With a global network of more than 667,000 members, and recognised worldwide as one of the most relevant global finance qualifications for professionals seeking a career in business, the CIMA Professional Qualification is backed by two of the world's leading accounting bodies – the Chartered Institute of Management Accountants (CIMA) and the American Institute of CPAs (AICPA).

“Our syllabus has three pillars, or levels – operational, management and strategic – which students can enter at any level if they meet specific educational and experience requirements,” explains Irene Teng, executive vice-president, global markets, at the Association of International Certified Professional Accountants. After a student progresses through all three levels of the CIMA syllabus and passes a series of objective test and case study exams, he or she will need to pass a final strategic case study exam. Once they pass this exam and complete the required practical experience, they will be eligible to obtain the Chartered Global Management Accountant (CGMA) designation.

“As our students progress through the programme, they develop the key skills and competencies, such as critical thinking, decision making, leadership and communications skills required to be successful in today's business environment,” Teng says. In addition, students and CGMA designation-holders also have access to the latest research and cutting-edge learning opportunities to help them stay at the forefront of changing business needs.



*Irene Teng*

As new and emerging technologies such as AI, big data and blockchain become more commonplace, Teng says this presents both opportunities and challenges for finance professionals. For example, machine learning is providing more accurate data, and at a quicker speed. This means many routine functions could be replaced by machines. It is estimated that by 2020, up to 40% of transactional accounting work will be automated, according to Accenture's Finance by 2020: Death by Digital report. This shift means that overall staff time on decision support, predictive analytics and performance management is predicted to grow from the current 25% to over 75%.

Teng explains that by leveraging technology to manage or automate some of the lower-value transactional work, qualified CIMA professionals will be able to spend more time producing accurate situational analysis and insights that inform strategic decision-making. This will enable finance teams to bring even greater value to the business and position themselves as true strategic business partners. However, to do this, management accountants will need to adapt and transform the way they work. This means a willingness to hone and develop the new skill sets required in an age of radical disruption: strategic thinking, decision-making, business partnering and influencing skills.

“Being a member of a professional body such as CIMA helps,” says Teng. “We support our members and students with the necessary access to knowledge and skills to stay relevant, evolve and embrace changes so that they are prepared for challenges such as new technologies and automation.”

As the statutory body responsible for the professional training, development and regulation of certified public accountants (CPAs), the Hong Kong Institute of Certified Public Accountants (HKICPA) is widening its self-learning qualification programme (QP) by offering alternative pathways and greater flexibility for students from different educational backgrounds, including nonaccounting graduates, to become CPAs. Jonathan Ng, HKICPA's executive director for qualification and education, says the initiative is the result of a comprehensive review of the Institute's qualifying process designed to reflect the needs of employers, businesses and future accounting professionals.

“The structure of the new QP has been widely welcomed by CPA employers” says Ng, who notes that accounting firms, including the “big four” professional services firms, have expanded their recruitment processes to attract students from non-accounting and finance backgrounds.

Under the enhanced QP format, CPA candidates complete three progressive levels, beginning at associate level (10 modules), professional level (four modules) and a final capstone level examination, which places an emphasis on ethical training and self-reflective learning activities. At the associate entry-level, exemptions are allowed for candidates who meet recognised criteria. For example, accounting degree holders will

not be required to go through the associate level, and can join the programme at professional level. With the first intake of candidates joining the QP in September 2019, the first associate level exams will be held in June 2020, the professional level in December 2020, and the capstone level in June 2021.



*Jonathan Ng*

To enrich learning journey and experiences for CPA candidates, new support materials and online resources, including videos and bitesized learning, have been developed. While the enriched QP offers increased flexibility and more pathway options, Ng stresses the new qualification programme has been rigorously benchmarked against leading global CPA programmes and is recognised internationally by the Global Accounting Alliance (GAA), which represents the world’s leading accountancy bodies.

“The hallmark of the QP is its international recognition,” Ng says, adding that on the successful completion of the programme, graduate CPAs will be equipped with future-ready skills, experience and ethical values to deliver high-quality services and add value to the organisations they work for.

## Protecting personal data

### [The Jakarta Post, Editorial Board, 4 January 2019](#)

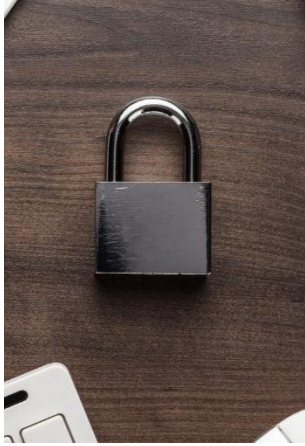
As information technology use appears to have no limits, personal data protection is becoming a cause for concern in many countries, including Indonesia. Thanks to the rapid advancement of technology, personal data gathered by banks, telecommunication providers, social media platforms and online shops is now more vulnerable to unauthorized use or careless processing than ever before and could inflict enormous losses.

When surfing or making transactions online, people might not be aware of the risks of submitting their personal data. Worse, they cannot do much, because the existing legal instrument is not adequate to defend them when

unauthorized use occurs. The misuse of credit card data in telemarketing, for example, is commonplace without any legal consequences.

Many online platforms have been accused of sharing personal data with other parties without the owners’ consent. This includes access to private messages. Even though a giant social media platform like Facebook has denied these allegations, it simply shows how vulnerable our data is to unauthorized, if not illicit, use.

In Indonesia, the most widespread misuse of personal data often occurs in the financial technology industry. As reported in the media, a number of



*(Shutterstock file)*

online lending platforms or peer-to-peer (P2P) lending companies used an application to access and retrieve contact numbers from debtors' mobile phones. The online platforms used these personal

contacts to humiliate borrowers if they defaulted on their debt.

At present, personal data protection is only governed under Communications and Information Ministerial Regulation No. 20/2016. However, this regulation is considered inadequate to address the growing use of personal data especially on social media, online market places and financial platforms.

It is good to hear that the ministry, representing the government, has submitted a bill on personal data protection for deliberation at the House of Representatives this year. However, because lawmakers are busy with preparations for the legislative and presidential elections in April, the

deliberation of the much-needed bill will not start anytime soon.

Given the urgency, it is necessary for the House to prioritize it. The state's role matters in line with its constitutional mandate to protect citizens' fundamental rights and freedoms related to personal data.

The bill might replicate the European Union's General Data Protection Regulation, which includes a provision about data subjects' right to ask for data removal or "the right to be forgotten".

Unlike the prevailing regulation — which limits personal data to sensitive information such as identity, financial and medical information — the bill will have a wider scope that will include email addresses, identification card numbers, location data on phones and even political views. Once in force, the law will shield us from any attempt to misuse our data for financial gain and other purposes.

Beyond the legal protection, educating citizens and providing them with new knowledge and best practices to protect their own personal data, especially when sharing them with other parties, is a role the government must also play.

## Young Indonesian talents sharpen IT skills to work for Singaporean firms

[\*The Jakarta Post, Fadli, 1 February 2019\*](#)

A Mozart composition could be heard in the open lounge area in a building at the Nongsa Digital Park in Batam, Riau Islands. Three young men sat around a table with laptops, phones and drinks visible, talking seriously and laughing occasionally.



The young men, aged 22 to 25 years old, were taking a short course at the Glints Academy located in the technology park to polish their information technology (IT) skills. They were among many who came from Jakarta, Semarang (Central Java), Medan (North Sumatra) and Riau.



*For Singaporean IT or startup companies, the Park is a great solution because they can reduce costs by recruiting Indonesians instead of Singaporeans. (JP/Fadli)*

The two-month course at the Glints Academy gives young people the skills to work for Singaporean startup companies. Despite job opportunities in the IT field being promising, it is not easy to find young people with the applicable skills.

The technology park is the realization of a commitment by President Joko “Jokowi” Widodo and Singaporean Prime Minister Lee Hsien Loong to develop Batam as a digital bridge between Singapore and Indonesia.

Singapore, through the Economic Development Board, has appointed PT Glints to act as a headhunter for the recruitment of Indonesian human resources that suits the needs of companies in Singapore.

“In Singapore, the demand [for IT employees] is very high, while the availability of human resources is limited [...] The Glints Academy was created to ensure that available [Indonesian] human resources are qualified to work for Singaporean companies,” Nara Dewa, Citra Mas Group human resources and general affairs manager, said recently.

Find Indonesian talents who want to work remotely from Batam for Singaporean companies has proven to be challenging as many big local startup companies, such as ride-hailing company Go-Jek and e-commerce platforms Tokopedia and Lazada, also need qualified IT employees.



*The young men, aged 22 to 25 years old, were taking a short course at the Glints Academy located in the technology park to polish their information technology (IT) skills. (JP/Fadli)*

Many local talents prefer to work for these popular local IT companies as it means they would not have to move to Batam, which is a one-hour ferry trip from Singapore.

The park hosted the e27 academy from Nov. 28 to 30 last year and welcomed 200 guests from Indonesia and Singapore. Kris Wiluan, Citramas Group president director, said the e27 academy was organized to prepare Indonesian human resources to become technopreneurs.

“We want these young people to understand the concept. One simple example is how almost everyone can make coffee, and yet coffee made by Starbucks is different. They have the concept,” he said. The park is a subsidiary of Citramas Group and a strategic partner of the e27, a regional platform established for the media, community, event, talent and ecosystems related to funding startups.

The park was built by the Citramas Group on a 166-hectare plot of land. About 3 hectares has been built with an investment of Rp 80 billion. It is located near luxury resorts in Batam and next to the Nongsa Point Marina ferry terminal, from where ferries depart for Tanah Merah in Singapore.

The park was inaugurated by Foreign Minister Retno LP Marsudi and Singaporean Foreign Minister Vivian Balakrishnan on March 21 last year. It hopes to attract more than US\$500 million in investment in the digital economy and create 10,000 jobs.



*An office in Nongsa Digital Park. (JP/Fadli)*

Andi Satriawan Lubis, performance and culture manager at PT Glints Indonesia, said 110 Indonesians currently worked remotely from Batam for 80 Singaporean companies. Of the figure, only 30 percent of the young talents come from Batam and the remainder from Yogyakarta, Bandung, Ambon and other cities.

For Singaporean IT or startup companies, the park is a great solution because they can reduce costs by recruiting Indonesians instead of Singaporeans.

As an illustration, the standard salary for a fresh graduate in Singapore is S\$3,600 (US\$2,670) per month, for the intermediate level \$5,000 to \$7,000 per month and the proficient level \$10,000 per month.

In Indonesia, the monthly salary for fresh graduates starts at \$500, \$1,000 for the intermediate level and \$2,000 for the proficient level.

“We encourage Indonesians to work for Singaporean companies first so that in a few years they can enter the international job market and get better incomes,” he said.

Felix Prawira Azali, 25, a young talent who works remotely from the park for Stendard, a Singaporean IT company, said he was recruited through Glints and was now working full-time.

“My target is to work here for two years and directly go to Singapore to work there,” said Felix, who graduated from Gadjah Mada University in Yogyakarta. (win)

## Korea and US in race for world's 1st 5G service

*The Korea Times, Jun Ji-hye, 19 March 2019*

Companies in Korea and the United States are engaged in a cutthroat competition for the title of the world's first fifth-generation (5G) networks services provider. The competition has become fiercer after U.S.-based telecommunications company Verizon said March 13 that it was going to launch its 5G networks on April 11 in several cities including Chicago.

Korean mobile carriers were originally planning to fully commercialize the world's first 5G network services by the end of March, but the plan has hit a snag due to a delay in the launch of 5G smartphones and approval of subscriber plans.

The delay raised the possibility that Korea's plan could be postponed until sometime in April, but following the U.S. firm's announcement, Korean companies and the government appear to be rushing to launch the services no later than April 10 in order to grab the title of the "world's first 5G service provider."

Officials at telecom companies here said the key to the plan is the on-time launch of 5G smartphones.



As the tech company acquired the certification, it is expected to deliver 5G smartphones to mobile carriers at the earliest possible date.

"We have finished preparations for the launch of 5G services as we sent the first 5G signal on Dec. 1," an official from a telecom company said, asking not to be named.

Samsung Electronics was originally expected to launch the Galaxy S10 5G model in March, but this has been postponed, with industry sources saying the firm seems to need more time for testing.

Amid growing concerns over missing the title, Samsung Galaxy S10 5G model has recently acquired a certification for electromagnetic wave testing by the National Radio Research Agency.

It is essential for communication device manufactures to achieve such a certification to launch products on the domestic market.

But there are still variables as the Ministry of Science and ICT has yet to approve SK Telecom's (SKT) pricing plan for 5G services. The nation's top mobile carrier needs to receive approval from the government to introduce new payment systems.

On March 5, the ministry said it did not approve SKT's pricing plan as the firm designed expensive fee systems only for those using massive data. SKT is currently adjusting its pricing plan to again seek government approval again.

Two other mobile carriers, KT and LG Uplus, may have no choice but to wait for SKT to get approval, before designing their own fee systems, which is raising uncertainty about the schedule.

An official from the ministry said, "The government has been keenly cooperating with mobile carriers and smartphone makers based on the belief that it is most important to offer the highest level of 5G services for a successful launch."

He noted the government will continue to push the launch of the world's first commercial 5G service.

## ICT holds high investment potential in Nepal

### [The Rising Nepal, 30 March 2019](#)

Kathmandu - Minister for Communication and Information Technology Gokul Prasad Baskota on Friday said that there was high investment potential in information and communication technology (ICT) as the government was effortful to make Nepal digital.

Addressing the ICT Session: 'Making Digital Economy' in the Nepal Investment Summit 2019 that kicked off in capital, Minister Baskota said that the government was making Digital Nepal Framework to digitize the economy.

Minister Baskota said that the government had prepared a favourable

ground to invest in Nepal, including in ICT sector, through policy reforms and other initiatives.

He said that the government had given high priority to the ICT as the driving sector for the economic prosperity of the country.

Minister Baskota said that the government had offered various incentives to the national and international investors through various laws and policies.

Foreign Investment and Technology Transfer Act (FITTA), Especial Economic Zone Act, Broad Band Policy Act, Labour Act, among others, have been made investor-friendly for attracting more investment, he said.

Minister Baskota said that the government was going to set up its own communication satellite and security printing press in the near future.

Highlighting the major laws and policies of the government in the ICT sector, joint secretary at the Ministry of

Communication and Information Technology Birendra Kumar Shrestha said that the government was formulating new ICT act in order to address various issues in the development of ICT sector.

Chandra Balani, head of Geographical Incubation, Amazon Internet Service India, said that Nepal held high investment potential as it was far behind compared to India.

Masahiro Miyashita, general manager of Sumitomo, Japan, said that the Internet of things (IoT) and artificial intelligence (AI) could be used in all sectors of economy including agriculture and industry for making the economy digital.

Soniya Basir Kabir, MD, Microsoft Asia Pasific, said that education and incentive should be given to women to increase their involvement in the ICT sector.

Ashutosh Tiwari had moderated the ICT session.

## **Pakistan lags behind its regional competitors in ICT exports**

[The Daily Times, 13 February 2019](#)

Pakistan lags behind its regional competitors in ICT exports, despite the fact that the country was able to increase its ICT revenues; it has fallen two points in the international rankings compared to last year, said State Bank of Pakistan (SBP) .

However, ICT exports of Pakistan touched US\$ 1 billion for the first time ever in FY18 while Pakistanis have begun to figure prominently in electronic freelancing lately.

Pakistan was home to the third largest population of professionals related to global online gig industry after India and Bangladesh, as per the ranking available at end

September 2018. Improved internet access to more than 2,000 cities across Pakistan; a large number of graduates entering the workforce; and government efforts to promote freelancing are the key factors behind this growth.

As per the official statistics, computer services have generated most of the export momentum in recent years. However, while software exports have displayed a more-or-less stagnant export performance over the previous 5 years, a steady growth has been observed in the export of consultancy services.

The State Bank of Pakistan (SBP) in its first quarterly report on the State of Pakistan's Economy for FY19, said estimates by industry experts place the total size of Pakistan's ICT exports at around US\$ 2.5 billion. Of these exports, registered firms using formal banking channels to collect export receipts account for around US\$ 1 billion, however, roughly US\$ 1 billion is attributed to SME exports in the grey market, and the remaining US\$ 0.5 billion is accounted for by freelancers in the IT and IT-enabled services (ITES) space that serve international clients.



According to the A.T. Kearney Global Services location index of 2017, Pakistan is the 10th most attractive destination among Asian countries, and 30th in the world, for offshore services. Pakistan's score was most encouraging in financial attractiveness: 3<sup>rd</sup> largest among Asians after Sri Lanka and Egypt amongst the 55-country index.

Pakistan had made a very late entry in call centers outsourcing industry, as an inadequate telecom infrastructure and slow pace of skill-building of the human resource did not allow it to capitalize on significant expansions in the global BPO industry that started a couple of decades ago.

Recently, Pakistan has significantly developed its backup internet support by installing six internet gateways, all the while widening the accessibility with the rollout of the NGMS (3G/4G/LTE) services. Not only has this helped improve the reliability of the communication system, but it has also aided in enhancing the speed and ability of the system to ensure faster connectivity. Realizing this opportunity, an average of 200 call centers got registered with the Pakistan Software Export Board (PSEB) on an annual basis over the past decade, with their export earnings, albeit still at a low level in terms of value, consistently growing at a rapid pace.

It is pertinent to note that Pakistan has an abundant supply of young and English-speaking population who can potentially assume the nature of the jobs that BPO has to offer. However, since the industry is relatively new to the country, it is still not being pursued as a long-term career; the more qualified employees tend to upgrade their careers and move into software development, quitting the BPO industry after a very short span of time. As for the new entrants, the lack of technical and professional capacities works as a major growth barrier, making it hard for the BPO industry to compete in the international market.

## **Philippines DOF taps Israel for technology, construction sectors**

[Manila Times, 11 February 2019](#)

Finance Secretary Carlos Dominguez 3rd invited Israel to explore possible partnerships with the Philippines in the technology and construction sectors to enhance the government's capability in implementing big-ticket infrastructure projects under the "Build, Build, Build" program and applying digital innovations to expand the financial access of unbanked Filipinos.

During a recent meeting with Israeli Ambassador Rafael Harpaz, Dominguez also welcomed Israel's proposal to establish a financial protocol with the Philippines to promote bilateral trade and investments.

Recognizing Israel's status as one of the world's most active hubs of technology innovation and "green" or eco-friendly

construction, Dominguez said the Philippines can learn much from Israel's expertise in these fields to ensure that the "Build, Build, Build" program is implemented efficiently by optimizing the use of labor and other resources.

"There are ample opportunities for bilateral cooperation between the Philippines and Israel in the technology and construction sectors. We have invited Israeli experts in these fields to visit the Philippines to explore possible cooperation arrangements," Dominguez said.

Undersecretary Mark Dennis Joven, who heads the International Finance Group (IFG) of the Department of Finance (DOF), was tasked to coordinate with the Israeli Embassy on these matters, Dominguez added.



Dominguez said he has also asked Bangko Sentral ng Pilipinas (BSP) Deputy Governor Chuchi Fonacier to meet with Israeli officials to discuss ways of tapping Israel's technological innovations in cybersecurity, as the Philippines increasingly uses electronic payments systems to facilitate trade and expand the financial access of unbanked Filipinos.

Ambassador Harpaz, for his part, welcomed Dominguez's proposals and offered Israel's assistance in improving the Philippines' capacity to utilize "green" technologies in implementing infrastructure projects as well as digital solutions to improve BSP's cybersecurity system.

He also cited the need to establish a financial protocol with the Philippines, especially now that at least 10 Israeli companies have expressed interest in investing in New Clark City in Pampanga, which is being showcased by the Duterte administration as the country's first smart and green metropolis.

"It is something we can look into," Harpaz said during the meeting, as he

pointed out that Israel has already concluded and signed financial protocols with some countries in the region.

Total bilateral trade between the Philippines and Israel amounted to \$170.57 million in 2018.

Israel ranked 42nd among the markets for Philippine exports in 2018, with electrical machinery and equipment, commodities, preparations of meat, fish crustaceans, nuclear reactors, and medical instruments making up 71 percent of the goods exported to that country. The Philippines, in turn, had imported mostly electrical machinery, nuclear machinery, arms/ammunitions and fertilizers from Israel.

The two countries signed these three agreements during President Duterte's state visit to Israel in September last year: the Memorandum of Agreement on the temporary employment of home-based Filipino caregivers; Memorandum of Understanding on scientific cooperation; and Memorandum of Intent on the collaboration on promotion of bilateral direct investments.

## **DICT: \$4.5-billion investment needed to allow the Philippines to catch up with neighbors**

**[Business Mirror, Jovee Marie de la Cruz, 9 April 2019](#)**

The Department of Information and Communications Technology (DICT) on Monday said \$4.5 billion in investment is needed to construct 50,000 new towers that would improve telco services in the Philippines.

At a hearing of the House Committee on Information and Communications Technology, Acting DICT Secretary Eliseo Rio Jr. said the Philippines needs an additional 50,000 towers to improve services and to catch up with its ASEAN

neighbors as he admitted that the country has only 18,000 cell towers.



He said building 50,000 telco towers will need an investment of \$4.5 billion. A construction of a tower will cost P3 million to P5 million.

“More or less we need 50,000 towers to catch up [with ASEAN neighbors] and [support the] 18,000 towers we currently have,” Rio said.

According to Rio, the Philippines has the lowest density in the ASEAN region with 0.14 per 1,000 subscribers—far from 0.5 mark per 1,000 subscribers, and the 50,000 towers will help achieve this mark. Rio said the agency wants to be on a par with Vietnam with its 70,000 cell sites.

Moreover, Rio said private firms will be allowed to build new towers so that no fresh funds will be needed from the government.

Rio said the country’s three telco players—Globe, Smart and Mislattel Consortium—have already identified 1,000 areas for the common tower projects. He said 19 companies have

already signed memoranda of understanding with DICT for such tower projects.

For his part, Atty. Vicente Castelo of Globe Telecommunication reiterated the telcos’ concern over the long process entailed to put up a tower.

He said telcos have to get approval for at least 25 permits, including from local government units, to get a cell site tower constructed.

Earlier, Nacionalista Party Rep. Luis Raymund Villafuerte of Camarines Sur said the Palace’s directive to DICT to cut the processing time for the construction of cell sites and other telecoms-related infrastructure to a week from the current average of eight months will send another strong signal to investors that the government is serious about cutting red tape.

According to Villafuerte, after slashing the processing time, the next step would be to cut the number of permits, noting the approvals needed for at least 25 permits to get a base transceiver station constructed.

He said the government should also heed calls by telcos to standardize fees in securing permits—ranging from P5,000 to P200,000 depending on the LGU—so as to prevent corruption and address concerns involved in setting up telecommunication facilities inside private subdivisions and exclusive villages.

## Vietnam to lack 400,000 IT workers by 2020

[Vietnam net, 8 April 2019](#)

Vietnam will need an additional 400,000 information technology (IT) personnel by 2020, heard a forum on information and communications technology (ICT) human resources held in Hanoi on Saturday.



*(Photo: phongvu.vn)*

Vietnamworks predicts that, by 2020, Vietnam will lack some 400,000 IT workers and each year, Vietnam will need 78,000 IT employees.

According to the Ministry of Education and Training, 37.5% of universities and colleges in Vietnam offer ICT majors. Each year, there are about 50,000 IT graduates.

On the other hand, the statistics of the Ministry of Information and

Communications show the number of job openings in the software and IT industry increases by about 30,000 every year.

It is forecast by 2020, the recruitment demand of enterprises will be 1 million IT personnel. Job website Vietnamworks also predicts that, by 2020, Vietnam will lack some 400,000 IT workers and each year, Vietnam will need 78,000 new IT employees.

Despite a huge demand for ICT human resources, Phi Anh Tuan, vice president of HCM City Computer Association, said domestic IT training programmes have not met demand, especially for high quality engineers. Only about 27% of IT workers can meet the requirements, the rest need additional training for a minimum of three months.

IT students face many challenges such as the rapid speed of technology development; AI; IoT; Blockchain.

Therefore, IT students need to improve regularly for the demand of high quality of IT human resources and also need co-ordination to help improve the quality of IT human resource training, Tuan suggested.

## Da Nang launches ‘smart city’ plan

*Vietnam News, 12 April 2019*



*A corner of Da Nang City by the Han River. A new plan aims to develop the city into a start-up and innovative hub in the central region, said director of the city’s IT Department Nguyen Quang Thanh. VNA/VNS (Photo Tran Le Lam)*

Da Nang – Da Nang is planning to become a ‘smart city’ and the first in Vietnam to join the ASEAN ‘smart’ city network by 2030.

Director of the city’s IT Department Nguyen Quang Thanh said at the launch of the city’s plan towards 2030 with a vision to 2045 that it would be built in three phases with total investment of VND2.14 trillion (US\$95 million), of which 30% would come from the State budget.

Thanh said the city had approved the framework the plan in 2018 with information and communication technology (ICT) infrastructure and database.

It will include smart management, smart economy, smart environment, smart

living, smart citizens and smart traffic to connect the city to the 126 ASEAN ‘smart city’ network, Thanh said.

“The plan will help develop Da Nang as a ‘start-up and innovative’ city in creating a driving force for socio-economic growth for the central region of Vietnam.”

Da Nang was the first city in Vietnam to launch an e-Government system in 2014, and transferred the system to 16 cities and provinces in 2016.

According to a report, Da Nang e-Government system had been used by 225 agencies and 4,000 users.

Da Nang had provided 1,200 online administration procedures, including one-stop shops, residential management, public transport and water

supervision through the e-Government system, while free wireless internet services offer a maximum of 20,000 connections in public places, according to the city's information and communications department.

Thanh also said the plan would raise funds from partners including the Vietnam Posts and Telecommunications (VNPT) Group; Software giant FPT, Viettel Group, the World Bank, Vietinbank and KOICA and other ODA.

Nguyen Thanh Phuc from Ministry of Information and Communications said the plan would save VND1 trillion (\$44.2 million) and 20% of other costs for human resources in the city.

Phuc said the plan would also help promote transparency, while improving administrative reform.

He said residents would have easy access to clear information on land, administrative procedure, planning, social services, disaster warnings, healthcare and education online.

The city's IT infrastructure was available for smart connections for air control, water, garbage, meteorology and energy agencies. It could also provide earthquake and tsunami warnings, and data on flooding, erosion, sewage management and food safety.

Last year, Da Nang's information technology and communications industry earned \$1.23 billion in revenue, of which 68% was from the IT and electronics manufacturing sectors, contributing 5.5% to Da Nang's Gross Regional Domestic Product (GRDP).

The city's software exports grew in 2018 to \$78 million.

There were 3,000 IT businesses with 25,000 jobs, of which 43% were in software services and IT outsourcing.

According to the department, Japan and the US were seen as the two key markets for Da Nang's software exports, accounting for 72% of export turnover in 2018.

The city has launched the first stage of the 341ha Da Nang Information Technology Park (DITP) – central Vietnam's 'Silicon Valley' - with total investment of \$278 million.

The park will create revenue of \$1.5 billion each year with 25,000 jobs and a satellite city of 100,000 people.

Da Nang's software park has been recognised as a centralised information technology centre, the third in Việt Nam after Hanoi and HCM City. — VNS

## ICT giant CMC Corporation launches new open ecosystem, eyeing knowledge and data sharing to boost digital economy

[Vietnam News, 10 April 2019](#)



*Technicians at CMC Corporation's data centre. (Photo courtesy of CMC)*

Hanoi - The telecoms and IT giant CMC Corporation launched the open ecosystem for enterprise (C.OPE2N) – the first of its kind in Vietnam – to help foster a digital economy and a “Vietnam 4.0”.

The new open ecosystem will offer a wide range of services and benefits for Government agencies, enterprises and organisations in order to share and connect knowledge among Vietnamese people in the era of digital transformation.

Digital transformation is a process that occurs in each different sector and industry based on their scale and operation structure. This process generates data packages that have a variety of content, volume and security.

In the era of Industry 4.0, all enterprises are aware that data is their most important asset and that it must be used and shared carefully and efficiently. In the last 10 years, the world’s top tech giants such as Amazon, Google and Alibaba have considered ecosystems a key instrument for their businesses. Those firms have developed their own data ecosystems to explore and improve their own competitive advantages.

Thus, data connection is key for the transformation as each ecosystem aims to create a platform to link hardware and software via the internet, operation systems and applications running on the hardware.

“Infrastructure must come first. The Ministry of Information and Communications always expects Vietnamese companies will carry out

their digital transformation and upgrade their facility – the core of digital transformation,” said Minister Nguyen Manh Hung.

“Vietnam, with six million business and economic entities – including more than 700,000 active businesses, must count on a cloud system to help those entities process the digital transformation” and the country needs thousands of IT firms to speed up the process, he said at the launching ceremony.

“What we see today is the first strong step taken by CMC Corporation to turn Vietnam into a digital hub in ASEAN, where data is stored and shared among each other,” especially when Vietnam is leading ASEAN in 5G technology, roaming fees and cybersecurity, Hung said.

He added that the Ministry of Information and Communications welcomed CMC Corporation's initiative to provide digital transformation services for local enterprises and organisations with its cloud system.

“Let’s hope C.OPE2N, with contributions and efforts of global leading IT giants, will help Vietnam enhance and hasten in developing its digital economy and promote the Vietnamese ICT sector.”

As one of Vietnam’s top information-technology (IT) and telecom enterprises, CMC Corporation has been exploring new technologies such as Big Data, Artificial Intelligence (AI), security, Internet of Things (IoT) and robotics to meet rising demand in the new era of high-technology.

“The C.OPE2N ecosystem will help enterprises and organisations go

through their digital transformation process, and get access to the best knowledge and technologies as quickly as possible,” said CMC CEO and chairman Nguyen Trung Chinh.

The ecosystem would enable Vietnamese enterprises to connect to up-to-date knowledge and data in the world and make the best use of benefits brought by the development of a digital economy, he said.

“Being built on the ‘open principle’, the ecosystem is expected to assist Vietnam and its business community to jump big in the Fourth Industrial Revolution.”

The C.OPE2N ecosystem was fully developed in early 2019, and it is a platform openly structured to integrate all of CMC’s best technologies such as Multi-Cloud, Data Lake, AI and application platforms. With the new ecosystem, Government agencies, enterprises and other clients of CMC Corporation can now access and share digitised data packages on the platform.

CMC expects the platform to become an imitative modern digital society that reflects the company’s desire to work with the Government to develop and complete a code of digitised data management, contributing to the foundation of a specific data digitisation framework that matches the country’s socio-economic growth.

Based on the C.OPE2N platform, the Government may be able to improve its public services, speed up its administrative procedures and bolster the performance of the e-Government system, thus cutting IT costs for Government agencies.

As it is built on the network of high-quality data centres and telecommunication stations as well as the international-standard cybersecurity system, C.OPE2N will be the best choice for the Government and its ministries and local authorities when it comes down to the fight against cyberattacks, assuring higher quality of information security and better enforcement of the Law on Cybersecurity.

For businesses and partners, C.OPE2N offers an open telecommunication platform, which is combined with high-quality gigabit-capable passive optical networks (GPON), and international-standard data centres located in Hanoi and HCM City.

Among the main core values of the system is its multi-cloud service, which allows enterprises and organisations to connect to other IT ecosystems in the world as whoever has helped CMC to develop the ecosystem also has its own ecosystem, according to Chinh.

“Only a few number of Vietnamese businesses have plans for digital transformation while about 85 per cent of global enterprises have done so, indicating the digital transformation process in Vietnam has lagged behind the world,” he said.

More local companies are expected to join the process and succeed in doing so, he added. “Businesses that agree to join the C.OPE2N ecosystem may save 30% of total costs.”

“I expect we won’t be only able to approach Vietnamese enterprises but also reach out for those in ASEAN, then Asia-Pacific. We want to turn Vietnam into a digital hub of the Asia-Pacific. We have to plan for it now,” Chinh said.

“We commit to perfecting our system to provide better products and services for customers. Those users will determine our success and they are also the ones who have the decisive role in the development of their businesses.”

Having been working with CMC in years, the Vietnam Joint Stock Commercial Bank for Industry and Trade (VietinBank) signed an agreement on comprehensive co-operation.

The C.OPE2N ecosystem and its cloud technology would help reduce some workload for the bank, Tran Cong Quynh Lan, deputy CEO of VietinBank, said.

ICT would play a big part in the bank’s future operation as it would help optimise work process, from identifying potential customers to approaching them, cutting procedures and maximising business performance, he said.

“The development of such an ecosystem means a lot to VietinBank and other commercial banks in Vietnam as banks are now able to cut expenses for technology research and development, take advantage of the modern infrastructure and improve the quality of products and services,” Lan added. — VNS



## Digital economy requires multilateral approach

APEC, 12 March 2019



*OECD Secretary General Angel Gurría & APEC Executive Director Dr. Rebecca Sta. Maria*

The APEC Secretariat and the Organization for Economic Cooperation and Development, or OECD, will strengthen its collaborative efforts to support sustainable inclusive growth in the Asia Pacific region, said APEC Executive Director Dr Rebecca Sta Maria during her meeting with OECD Secretary General Angel Gurría.

“The OECD is an integral partner for APEC’s efforts to strengthen our economies for the 21st century, and we look forward to working closer together in the future, particularly on the digital economy, a top priority for APEC Chile 2019,” said Dr. Sta Maria.

“The digital economy transcends borders and poses unfamiliar challenges,” she added. “Strong multilateral collaboration will be key to helping our economies navigate and succeed in this uncharted territory.”

Dr. Sta Maria addressed the challenges and opportunities of the digital economy during her participation in the OECD

Going Digital Summit, a high-level conference, which includes discussion of two seminal research reports. The summit brings together high-level policymakers responsible for the digital economy.

The OECD has a long-standing relationship with APEC that is based on policy research, knowledge sharing, and capacity building. The OECD and the APEC Policy Support Unit have an existing memorandum of understanding for closer cooperation.

“The Asia-Pacific region is vital to global economic growth. The OECD is committed to working with APEC and APEC economies in their goal to foster sustainable economic growth and prosperity in the Asia-Pacific region. Stronger multilateral collaboration on policy formulation – particularly related to improving connectivity, access, and security – can go a long way in helping ensure that digital transformation will be beneficial to all,” said OECD Secretary-General Angel Gurría.

The OECD’s contributions to APEC include providing substantive work on measuring the digital economy (including its gender divide) and international regulatory cooperation. Also in the works are a joint analysis with APEC on effective approaches to infrastructure financing and regular updates on international tax cooperation and transparency. The OECD is also willing to support APEC’s priorities on blockchain and digitalization in finance.

During her two-day visit to the OECD's headquarters in Paris, Dr. Sta Maria also participated in a high-level panel discussion on investment treaties, focusing on recent and ongoing treaty practice in the APEC region, particularly related to state-owned enterprises. She

also delivered an informal briefing to OECD members and Ambassadors on APEC's priorities for 2019.

Chile is the first OECD economy to host the APEC meetings since 2011.



**2019 CACCI Conference**

**33rd CACCI Conference  
to be held in  
Kitakyushu, Japan**

#### **About CACCI:**

Founded in 1966, the Confederation of Asia-Pacific Chambers of Commerce and Industry (CACCI) is a regional non-governmental association principally composed of the national chambers or associations of commerce and industry in Asia and the Western Pacific. Its current membership of 29 countries and independent economies cuts across national boundaries to link businessmen and promote economic growth throughout the Asia-Pacific region. CACCI holds Consultative Status in the Roster Category of United Nations' Economic and Social Council (ECOSOC)

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